

### **Amendments to the Drawings**

The attached sheet of drawings includes changes to FIG. 1A and FIG 1B. This sheet, which includes FIG. 1A and FIG. 1B replaces the original sheet including those figures. No items have been omitted.

Attachment: Replacement Sheet

### REMARKS

The Office Action dated August 16, 2005 has been carefully considered. Independent Claims 1 and 9 have been amended along the lines of allowed independent Claim 17. As such, Claims 1-8; 9-16; and 17-24 remain in the case with the Examiner indicating Claims 17-24 were allowable over the prior art.

The Examiner objected to the Drawings for failing to show process steps for the entire claimed method including the SO<sub>3</sub>. The Examiner's suggested changes have been made. With respect to the drawings, the Applicant has amended FIG. 1A to show that the sub-stoichiometric stage is a SO<sub>3</sub> reducing environment and that SO<sub>3</sub> levels are maintained in the excess air stage. Applicant has amended FIG. 1B to show that the micro-stage is a SO<sub>3</sub> reducing environment.

The Examiner also stated that the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. §112 for Claims 1-24. Applicant respectfully requests that the Office reconsider the claim for priority. Applicant believes the provisional application 60/544,724, titled SO<sub>3</sub> REDUCTION METHODS AND SYSTEMS, provides adequate support for the current application. Specifically, please see page 5, line 5 through page 6, line 10 of that application.

Finally, the Examiner has rejected Claims 1-8 and 9-16 under 35 U.S.C. §102(b) as being anticipated by Kindig. In rejecting Claims 1-8 and 9-16 the Examiner stated (underlining added):

Kindig shows...b) maintaining the reducing environment for a sufficient time period such that SO<sub>3</sub> is reduced to SO<sub>2</sub> to achieve a desirable level of SO<sub>3</sub>; (col. 13, lines 8-23, SO<sub>3</sub> and SO<sub>2</sub> are inherently produced during combustion, and reduction is inherently occurring).....

This rejection is respectfully traversed as follows. Kindig teaches maintaining an oxidizing environment. Specifically, Kindig teaches that "[the] formation of sulfur trioxide [from sulfur dioxide] according to the following reaction is favored..." (col. 13, lines 11-12). That is, Kindig teaches an environment where sulfur dioxide is inherently oxidized to sulfur trioxide. Further, Kindig teaches to increase oxidation through the use of a catalyst and provides

examples of several electron acceptors that could be used to drive the oxidation. (col. 13, lines 23-30).

It is respectfully submitted that Kindig does not teach, either expressly or inherently, Applicant's maintaining (as in original Claims 1 and 9) the reducing environment for a sufficient time period such that SO<sub>3</sub> is reduced to SO<sub>2</sub> to achieve a desirable level of SO<sub>3</sub>. As such, it is respectfully submitted that Kindig does not anticipate Applicant's invention as presently claimed. Nevertheless, the Applicant has changed the word "maintaining" to "adjusting" in independent Claims 1 and 9.

Independent Claim 1 has been amended to further distinguish over the scope of Claim 17 by reciting the relationship of the first step of the present invention to the step of selective catalytic reduction (SCR) in combustion processes which use that process (see, for example, specification, page 11, lines 13-25).

The Applicant submits that by this amendment he has placed the case in condition for immediate allowance and such action is respectfully requested. However, if any issue remains unresolved, Applicant's attorney would welcome the opportunity for a telephone interview to expedite allowance and issue.

Respectfully submitted,



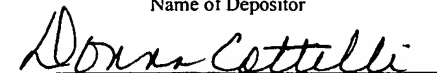
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Annotated Sheet Showing  
Changes Made

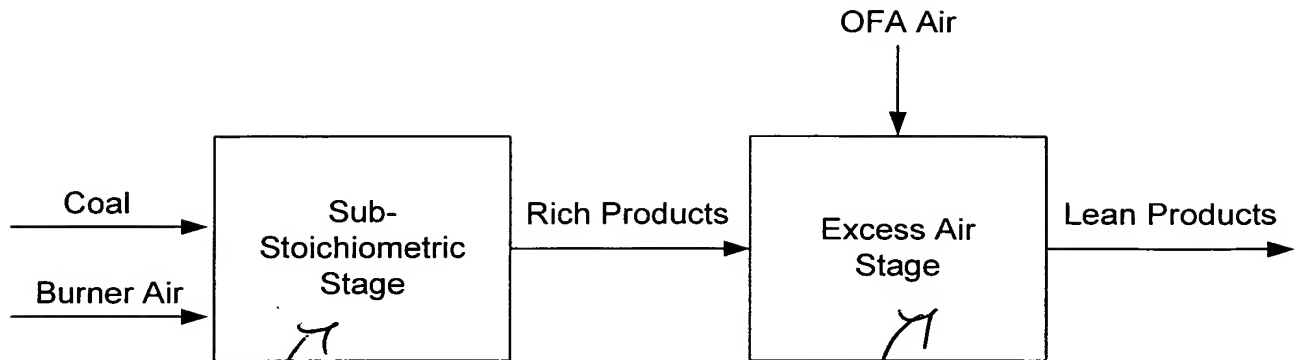


FIG. 1A

added  
SO<sub>3</sub> Reducing  
Environment

added  
SO<sub>3</sub> levels  
maintained

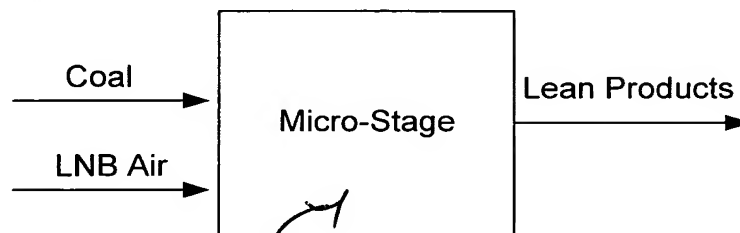


FIG. 1B

added  
SO<sub>3</sub> Reducing  
Environment